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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|-------------------------|------------------|
| 09/788,036 | 02/16/2001 | James A. Fitch | 42365-00450 | 5261 |
| 33623 | 7590 | 06/17/2004 | EXAMINER | |
| MARSH FISCHMANN & BREYFOGLE LLP/OPENWAVE SYSTEM INC. 3151 SOUTH VAUGHN WAY SUITE 411 AURORA, CO 80014 | | | CRAVER, CHARLES R | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2682 | |
| | | | DATE MAILED: 06/17/2004 | |

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/788,036

Applicant(s)

FITCH ET AL.

Examiner

Charles R Craver

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17-22 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 20 and 21 is/are allowed.
- 6) ☒ Claim(s) 17, 19, 22 and 23 is/are rejected.
- 7) ☒ Claim(s) 18 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 2-16-01 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>9</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 17 and 22 are rejected under 35 U.S.C. 102(e) as being anticipated by

Alanara, US Pat 6,061,561.

Claim 17: Alanara discloses a method for locating a mobile station in a geographical zone of an arbitrary shape including establishing a memory (reads hierarchical data structure) representing an area of interest including a first layer of cells and a second layer of microcells, and establishing a zone definition by reference to the data structure wherein the identification definition data identifies a cell and a microcell (col 4 line 63-col 5 line 9), receiving a location associated with the mobile station and determining whether or not the mobile station is in the location zone by using the location and the data structure including using the cell and microcell information (col 7 line 42-col 8 line 25). **Claim 22** is the inherent physical manifestation of the method of claim 17, and as such is rejected for the same reasons set forth above.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 19 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alanara.

While disclosing applicant's inventions of claim 17 and 22 above, Alanara fails to disclose a quadtree structure. However, given that the use of a quadtree structure was well known at the time of the invention, the examiner takes Official Notice of such a feature, asserting that one of ordinary skill in the art at the time of the invention would have found the use of such a standard spatial indexing method obvious.

Allowable Subject Matter

Claims 20 and 21 are allowed.

Claim 18 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

Claim 18 teaches towards a method for locating a mobile station in a geographical zone of an arbitrary shape including establishing a hierarchical data

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structure representing an area of interest including a first layer of cells and a second layer of subcells, and establishing a zone definition by reference to the data structure wherein the identification definition data identifies a cell and a subcell, receiving a location associated with the mobile station and determining whether or not the mobile station is in the location zone by using the location and the data structure including using the cell and subcell information, including further identifying a set of subcells corresponding to the zone and storing first zone information thusly, and identifying from said set of subcells a subset corresponding to a particular whole cell of the first layer, and storing second zone information corresponding to the first zone information wherein that regarding the subset is replaced by that of the first layer cell.

Claim 20 teaches towards a method for reconstructing a representation of an area of interest in a wireless telecommunication application including receiving a map of the area of interest, vectorizing the boundaries to define a polygon, establishing a hierarchical data structure including a first level of whole cells and a second layer of smaller subcells underneath the first cells, and establishing for at least one cell of the first layer and at least one subcell of the second layer indicators that indicate that the cell and subcell identify the polygon, and therein the indicators are used to determine if a mobile station location is within said polygon.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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Singer et al, Baynham, Hamada, Gustafsson, Smith and Graham discuss
locating means.

Any response to this action should be mailed to:

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Washington, D.C. 20231

Or faxed to:

(703) 872-9314 for both formal and informal/draft communications, labeled
as such.

Hand delivered responses should be brought to Crystal Park II, 2121

Crystal Drive, Arlington VA, sixth floor (receptionist).

Any inquiry concerning this or earlier communications from the examiner should
be directed to examiner Charles Craver at (703) 305-3965.

If attempts to reach the examiner are unsuccessful, the examiner's supervisor,
Vivian Chin, can be reached at (703) 308-6739.

Any inquiry of a general nature or relating to the status of this application should
be directed to the Group receptionist at (703) 305-4700.

CC

C.Craver

June 10, 2004


CHARLES CRAVER
PATENT EXAMINER